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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/634,509	08/05/2003	Jae-Won Song	LNK-0054	6909
7590 11/07/2006 CANTOR COLBURN LLP 35 Griffin Road South Bloomfield, CT 06002			EXAMINER PASCAL, LESLIE C	
			ART UNIT	PAPER NUMBER
			2613	

DATE MAILED: 11/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary

Application No.

10/634,509

Applicant(s)

SONG ET AL.

Examiner

Leslie Pascal

Art Unit

2613

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 October 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) 10-16 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-6,8 and 9 is/are rejected.
- 7) ☒ Claim(s) 3 and 7 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

1. Applicant's election without traverse of species I in the reply filed on 10-25-06 is acknowledged.

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-2, 5-6 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee et al (US 2003/0142978) or PCT/US03/01782.

Lee teaches a central office (central base station (US patent) or central office (WO patent), which has plural transmitters (101-103), plural receivers (104-106) connected by plural couplers (107-109) and a multiplexer/demultiplexer (110 (US patent) or 112 (WO patent)), a remote node (remote node), distribution optical communication lines (between remote node and subscribers) and means connected to the subscribers which have transmitters (119-121 (US patent) or 123-125 (WO patent)) and receivers (122-124 (US patent) or 120-122 (WO patent)) and splitters. Although he does not specifically call his means connected to the subscribers ONU's, it is well known to connect subscribers to a system with ONU's and would have been obvious to either call his devices ONU's or to use an ONU to connect to the subscriber. Figure 5 shows a bidirectional amplifier. It would have been obvious to use the same wavelength in order to communicate

4. Claims 1-2, 5-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fussganger et al (4957339).

Fussganger et al teach a central office (exchange) which has plural transmitters (2-3), plural receivers (E, E4) and splitters (14) and mux/demux (22), a fiber (1), a remote terminal which has a mux/demux (23) and subscribers which have transmitters (E1 and E3), receivers (S2 and S4) and splitters (15). Although he does not specifically call his means connected to the subscribers ONU's, it is well known to connect subscribers to a system with ONU's and would have been obvious to either call his devices ONU's or to use an ONU to connect to the subscriber.

5. Claims 4 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over either Lee or Fussganger as applied to claims 1-2 and 6 above, and further in view of Pinnow et al (4491983).

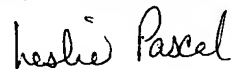
Although Lee and Fussganger teach that different wavelengths are used for the associated transmitters and receivers, Pinnow et al teach that it is well known to send different (figure 4) wavelength or the same wavelengths (figure 5) to subscribers. It would have been obvious to use the same wavelength sent and received from each subscriber in order to utilize fewer wavelengths, thus allowing more subscribers to be used in a system since the number of wavelengths that can be used in a system is limited.

6. Claims 3 and 7 are objected to as being dependent upon a rejected base claim but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leslie Pascal whose telephone number is 571-272-3032. The examiner can normally be reached on Monday- Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Chan can be reached on 571-272-3022. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Leslie Pascal
Primary Examiner
Art Unit 2613